



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,802	02/10/2004	Masashi Takahashi	90A 3527	5046

3713 7590 05/02/2006

KODA & ANDROLIA
2029 CENTURY PARK EAST
SUITE 1140
LOS ANGELES, CA 90067

EXAMINER

JOHNSON, JERROLD D

ART UNIT	PAPER NUMBER
----------	--------------

3728

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/776,802	Applicant(s) TAKAHASHI ET AL.	
	Examiner Jerrold Johnson	Art Unit 3728	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10Feb04, 06Apr05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 2 is objected to because of the following informalities: "(13)" in the last line of the claim is incorrect and should be replaced with "(3)". Also, please double check the spelling of "polyethylene-telephtalate", and proof read the spec. for spelling errors.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 44-12957 (cited by applicant).

Re claims 1-3, JP 44-12957 discloses all of the claim limitation of a cap 2 having a plug portion 2 having a top wall, a side wall 3, a cylindrical wall 4 forming a receiving chamber having an opening at its lower end, a seal plug 5 being fixed to said cylindrical wall 4 and having an outer diameter being larger than the outer diameter of the cylindrical wall 4, and the receiving chamber is filled with a filling. The cap further includes a sleeve 6,6b, the cylindrical wall 4 loosely fits into the sleeve (per claim 2), and the outer circumferential portion of the seal plug 5 extends to a position where it is below the sleeve 6,6b.

It is not believed that JP 44-12957 discloses that the sleeve 6,6b is welded to the inner circumferential surface of the opening of the vessel, or that the seal plug 5 is welded to the lower end face of the of the cylindrical wall 4.

The expression "welded" as is used in these two limitations is a product-by-process limitation. The significance of the welding process is understood from the specification as simplifying the manufacturing of the cap in that lower tolerances of the fit of the sleeve to the vessel, and the fit of the seal plug to the cylindrical wall are possible as compared to what levels of tolerances are needed for a friction fit, or resilient fit.

The structure set forth in JP 44-12957 is essentially the same structure as is claimed without the welded connection. Clearly, JP 44-12957 discloses a resilient snap fit of the seal plug 5 to the cylindrical wall 4 in Fig. 2. The manner in which sleeve 6 is secured to the inner circumference of the vessel is unclear as no translation has been provided, but it appears as though it is either a glued securement or a frictional fit. In any event, the product-by-process limitation of "welded" does imply a different structure from the structure that is disclosed in JP 44-12957.

However, as is set forth in Elliot US 6,003,728 col. 4, lines 51-65, snap fits, ultrasonic welding, glueing, induction melting, etc. are all art recognized equivalent structures for securing components of a cap and vessel. In order to rely on equivalence as a rationale supporting an obviousness-type rejection, the equivalency must be recognized in the prior art. *In re Ruff*, 256 F.2d 590, 118 USPQ 340 (CCPA 1958). Elliot US 6.003,728 represents evidence that snap fits, ultrasonic welding, glueing,

Art Unit: 3728

induction melting, etc. are all art-recognized equivalent structures in this application.

Therefore, because these joining methods were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the ultrasonic welding of Elliott for the snap fit/friction fit of JP 44-12957. An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

Accordingly, one of ordinary skill in the art would recognize that securing the sleeve 6,6b to the inner circumferential surface of the opening of the vessel, and the seal plug 5 to the lower end face of the of the cylindrical wall 4 through ultrasonic welding would be obvious. Manufacturing steps are generally chosen on the basis of efficiency and cost, and one of ordinary skill in the art would be motivated to choose ultrasonic welding in the event that there were cost savings over other processes.

Re claims 5-16, PET is one of the commonly used materials used in caps/vessels and their use would be obvious to one of ordinary skill in the art due to the recognition of the suitability of this material in this particular application. Additionally, as is also set forth in Elliot US 6,003,728 col. 4, lines 51-65, the material of the container to a large extent determines which of the manners of securement is most suitable. One of ordinary skill in the art desiring to use ultrasonic welding would recognize that for welding to be used both parts being secured through welding need to be of the same material.

Art Unit: 3728

Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 44-12957 in view of any one of Cavazza Australia Patent Specification 472,521 (cited by applicant), Kasuya US 6,705,462, Morini US 6,148,996 of Magni US 3,603,469.

Each of these patents teach the concept of where a first cap portion needs to break through a second portion, a sharp sloping face is the structural means through which this process is best accomplished.

Accordingly, were the seal plug 5 welded to the cylindrical wall 4 as is taught by Elliot US 6,003,728, it would have been obvious at the time of the invention to one of ordinary skill in the art to use a sharp head portion with a sloping end face on the bottom periphery of the sleeve 6,6b to facilitate the removal of the seal plug 5 from the cylindrical wall 4.

Conclusion

Prior art made of record and not relied upon is considered pertinent to applicant's disclosure, is as follows:

GB 2,371,286 shows a sleeve 12 having projections to secure the sleeve within the vessel.

Co-owned US 6,921,087 and US 4,386,696 show almost identical structures where the sleeve is wedged between the vessel and the seal plug resulting in the removal of the seal plug.

Art Unit: 3728

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerrold Johnson whose telephone number is 571-272-7141. The examiner can normally be reached on 9:30 to 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on 571-272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDJ 


Mickey Yu
Supervisory Patent Examiner
Group 3700